

Patent Claims

- 5 1. A compatible optical scanner (PU) with an improved laser modulator (M2) for recording or reproduction apparatuses of optical recording media, wherein the optical scanner (PU) with an improved laser modulator (M2) is a laser modulator (M2) that at
10 least partly or completely switches the laser current, and a means for simulating the input characteristic curve of a laser (LD1 or LD2) is provided at its input (E).
- 15 2. The compatible optical scanner (PU) as claimed in claim 1, wherein the means for simulating the input characteristic curve of a laser (LD1 or LD2) is a circuit arrangement that interacts with a current mirror of the optical scanner (PU), said
20 current mirror being provided for regulating the light power of a laser (LD1 or LD2).
- 25 3. The compatible optical scanner (PU) as claimed in claim 2, wherein the current mirror of the optical scanner (PU) that is provided for regulating the light power of a laser (LD1 or LD2) is an operational amplifier (OPV) driving a field-effect transistor (FET), the noninverting input (+) of which amplifier is connected to a line carrying
30 reference-ground potential (GD) via a first resistor (R1), the inverting input (-) of the operational amplifier (OPV) and the source of the field-effect transistor (FET) being connected to said line via a second resistor (R2), and the
35 drain of the field-effect transistor (FET) is an output (Out) provided for regulating the light power of a laser (LD1 or LD2).

4. The compatible optical scanner (PU) as claimed in claim 1, wherein a series circuit of diodes (D1...Dn) that is connected upstream of a current mirror of the optical scanner (PU) that is provided for regulating the light power of a laser (LD1 or LD2) is provided for simulating the input characteristic curve of a laser (LD1 or LD2).
5. The compatible optical scanner (PU) as claimed in claim 1, wherein a zener diode that is connected upstream of a current mirror of the optical scanner (PU) that is provided for regulating the light power of a laser (LD1 or LD2) is provided for simulating the input characteristic curve of a laser (LD1 or LD2).
6. The compatible optical scanner (PU) as claimed in claim 4, wherein the diodes (D1...Dn) form a series circuit of diodes (D1...Dn) arranged in the forward direction with a forward voltage (DD) corresponding to the operating voltage of a laser (LD1 or LD2).
7. The compatible optical scanner (PU) as claimed in claim 5, wherein a zener diode with a zener voltage corresponding to the operating voltage of a laser (LD1 or LD2) is provided.
8. The compatible optical scanner (PU) as claimed in claim 1, wherein the means for simulating the input characteristic curve of a laser (LD1 or LD2) is arranged on the optical scanner (PU).
9. The compatible optical scanner (PU) as claimed in claim 1, wherein the means for simulating the input characteristic curve of a laser (LD1 or LD2)

is integrated in the improved laser modulator (M2).

10. The compatible optical scanner (PU) as claimed in
5 claim 1, wherein the means for simulating the
input characteristic curve of a laser (LD1 or LD2)
is arranged on a main circuit board (H) of the
recording or reproduction apparatus of optical
10 recording media, said main circuit board providing
the current (IL11, IL21) for regulating the light
power of a laser (LD1 or LD2).